

Candidate Number:

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# PHYSICS Investigation

By: STUDENT NAME

Date: DD – MM – YYYY

Teacher: Mr. R. BOEYINK

School: International School Singapore

**“To what extent does  $x$  depend on  $y$ ?”**

## **Research Question**

State your research question, including the dependent and independent variables. Your question can be embedded in a more general introduction to the topic

## **Variables**

List your independent, dependent and controlled variables and mention how you are going to manipulate (or control) them. Don't forget units and perhaps a short paragraph on how you will measure them or keep them constant.

## **Hypothesis**

It is good to write a prediction or hypothesis, based on scientific reasoning. If you use sources, don't forget to reference them

## **Apparatus**

List all the equipment you are going to use

## **Diagram**

Include a labeled diagram or photo of your experimental setup

## **Method**

Write down a step-by-step method and state the range of your independent variable and state how many times you are measuring the dependent variable

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### **Raw Data**

Include your raw data in a table, including uncertainties

### **Processed Data**

Include your processed data in a table, including uncertainties and transform your data into a (linearised) graph or

## **C o n c l u s i o n**

Write down your final result(s) and state whether your data support the theory (by comparing your result to an accepted literature value)

## **E v a l u a t i o n**

Evaluate your experiment, method, conclusion

## **I m p r o v e m e n t s**

List (realistic) ways to improve the experiment, based on your evaluation

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## References

In case you use secondary source(s)

## Appendix

An appendix may contain additional information, such as photos of the setup, or the notes you used to write down your raw data and observations